



THE WETCAT NETWORK

Presentation to RWQCB-9
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City of Laguna Niguel
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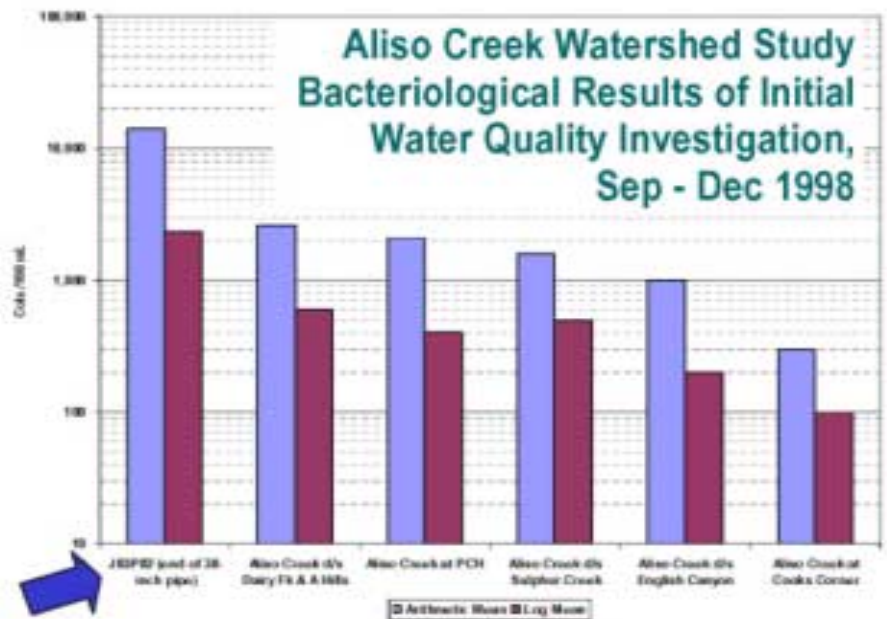
Laguna Niguel

Project Location



1998 Aliso Creek Watershed Management Planning Study

- Tested water quality parameters at 5 creek locations and 1 storm drain
- J03P02 storm drain outfall had fecal coliform concentrations 5 to 50 times higher than in-creek sites
- 3 years later, monitoring under the Aliso 13225 Directive demonstrated that high fecal coliform concentrations are not unusual for storm drains



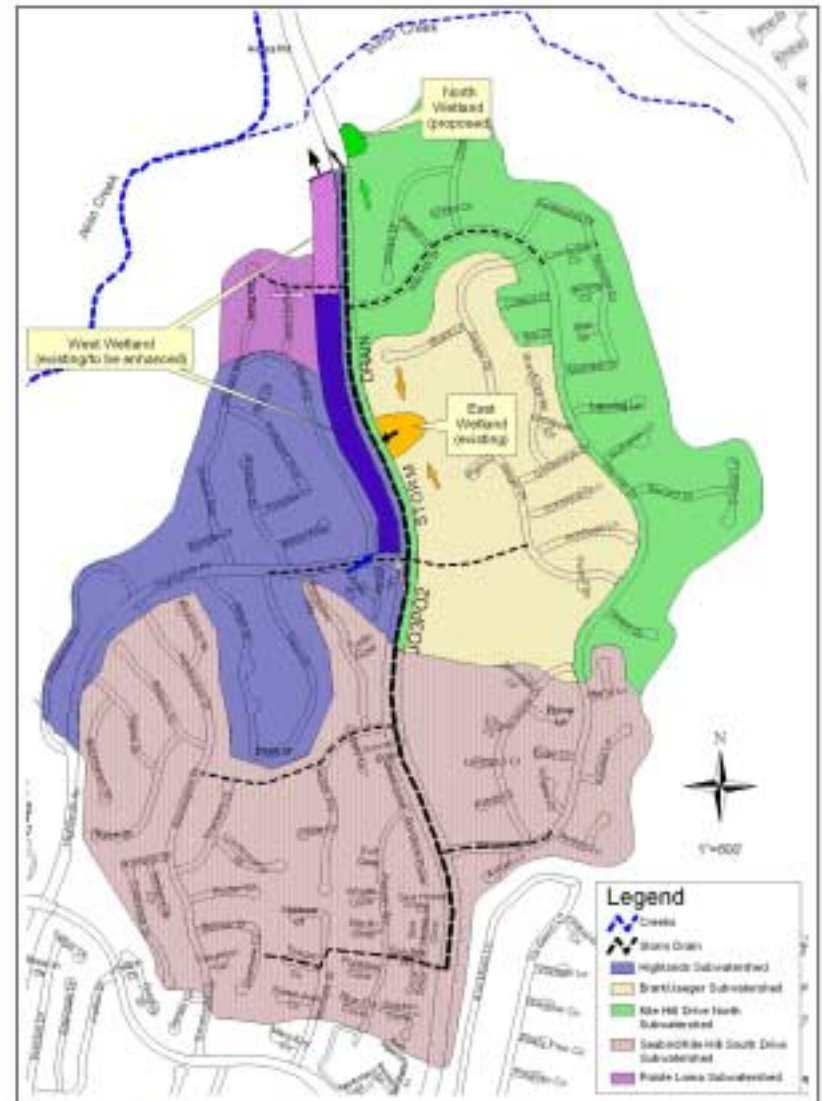
JO3P02 Subwatershed

- 0.9 sq. mile of hilly residential neighborhoods
- Subdrainages flow to 72" main pipe under Alicia Parkway
- Outfalls to Sulphur Creek 100' from Aliso Creek
- Storm drains and sewers videotaped in Fall 1999 but no cross-contamination ID'd
- CAO 99-211 of December 1999 accelerated Source ID and Treatment investigations



Wetland Capture and Treatment Network

- Constructed Treatment Wetlands known to reduce fecal coliform concentrations
- Developed concept to retrofit 3 treatment wetlands into the neighborhoods, based on subdrainage layout
- East, West and North Wetlands fed by low-flow gutter runoff and water diverted from storm drains
- RWQCB-9 staff helped develop Proposition 13 proposal that achieved #1 ranking statewide for 2001 Coastal NPS Program



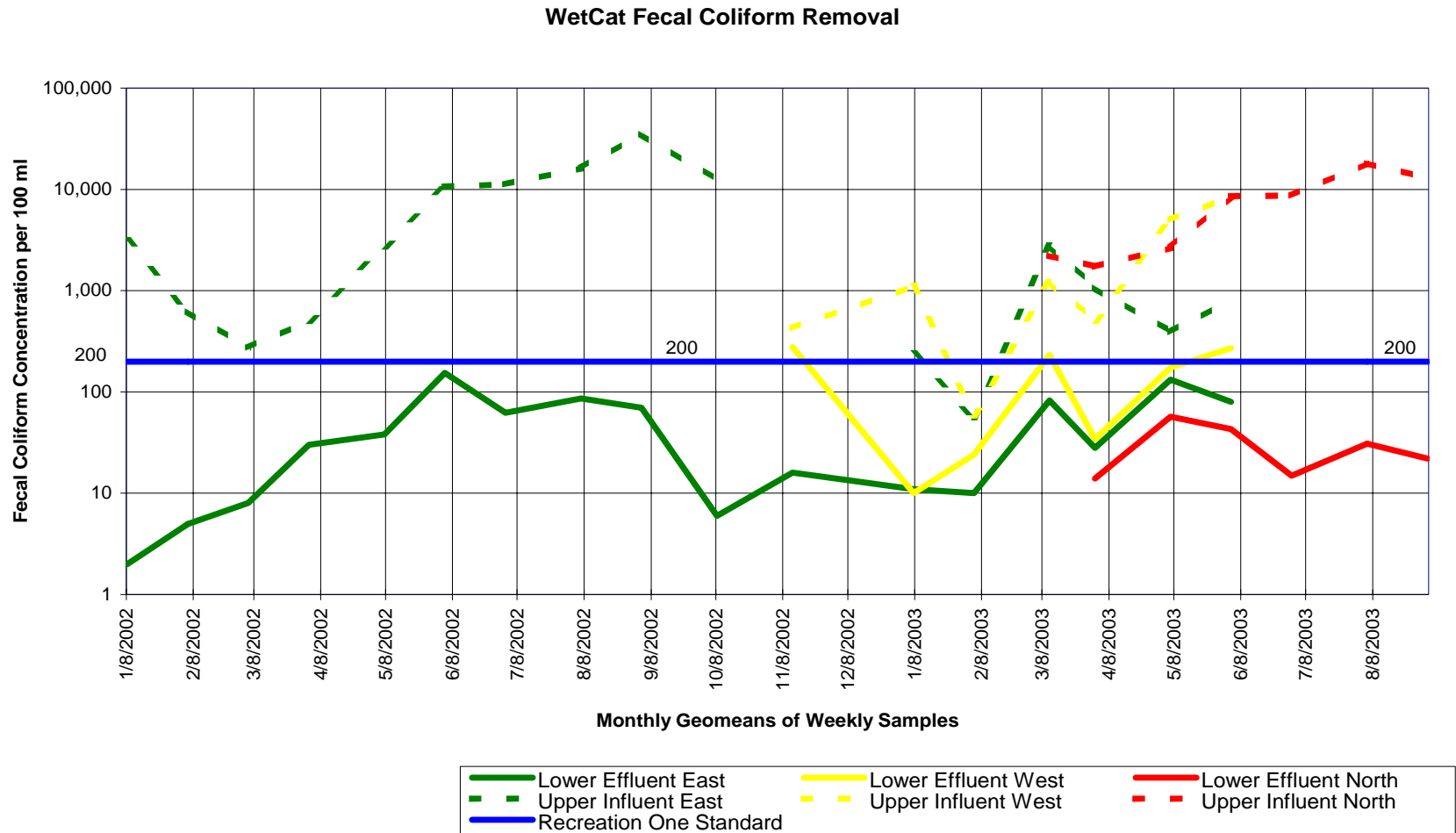
North Wetland Construction, Spring 2003



North Wetland Planting Growth, Fall 2003



WetCAT Network Treatment Performance



Upper Sulphur Creek Restoration Project

- WetCAT success benefiting water quality and habitat based on partnering with Homeowner Associations landowners
- Inspired City to seek other multi-benefit opportunities
- Proposition 13 Upper Sulphur Creek Restoration Project awarded in 2002
- Project will benefit XX acres owned by 3 HOAs at creek's uppermost reaches



Upper Sulphur Creek Restoration Project

- Will replace stretches where creek runs through concrete v-ditch and ornamental landscaping
- Will create naturalized soft-bottom channel, riparian vegetation and adjacent transitional vegetation
- City will take over long-term maintenance for public and environmental benefit



Proposed “Sulphur Solution” Project

Prevent, Control, Restore

- In 2003, Laguna Niguel teamed with Laguna Hills and County of Orange
- Proposing to restore a denuded flood control channel to viable natural wetland
- Will create beneficial use for wildlife habitat plus significant biofiltration capability in regional park



Proposed “Sulphur Solution” Project

Prevent, Control, Restore

- Emphasizes Pollution Prevention & Source Control
- Incentives to convert 1/2million sq. ft. of high-impact landscaping to low-impact, to Prevent Pollution
- Incentives to retrofit catch basins with debris screens & filters, to Control Pollution
- 200+ partners, mostly private business, HOA or residents
- Demonstrating what can be done if we all work together

